Minutes of the Monetary Policy Meeting

September 21, 2017

Central Bank of the R.O.C. (Taiwan)

Minutes¹ of the Joint Meeting of the Board of Directors and the Board of Supervisors on September 21, 2017

Date and Time: September 21, 2017, at 3 p.m.

Location: Room A606, Main Building, Central Bank of the R.O.C. (Taiwan)

Members Present:

Chairman, Board of Directors: Fai-nan Perng

Executive Directors:

Yu-jer Sheu, Jong-Chin Shen, Chin-long Yang, Tzung-ta Yen, Ming-yih Liang, Sheng-cheng Hu

Directors:

Tsung-hsien Lin, Chen-chia Lee, Tsan-chang Liao, Chao-yih Chen, Jin-lung Lin, Mei-lie Chu, Chao-hsi Huang, Bih-jane Liu

Chairman, Board of Supervisors: Tzer-ming Chu

Supervisors:

Chi-yuan Liang, Tsung-jung Liu, Ping-yung Chiu, Ching-fan Chung

Staff Present:

E-dawn Chen, Director General, Department of Banking

James T.H. Shih, Director General, Department of Issuing

Hui-huang Yen, Director General, Department of Foreign Exchange

¹ This English translation is provided for information purposes only; the Chinese version shall prevail in case of discrepancies.

Yue-min Chen, Director General, Department of the Treasury

Tsuey-ling Hsiao, Director General, Department of Financial Inspection

Tzong-yau Lin, Director General, Department of Economic Research

Chien-ching Liang, Director General, Secretariat

Kuei-chou Huang, Director General, Department of Accounting

Jhih-cheng Hong, Director, Personnel Office

Kun-shan Wu, Director, Legal Affairs Office

Lien-Hwa Hsiang, Secretary, Board of Supervisors

Chih-cheng Hu, Secretary, Board of Directors

Presiding: Fai-nan Perng

Topics: Economic and Financial Conditions and Monetary Policy

I. International and Domestic Economic and Financial Conditions

Review by Department of Economic Research

1. International Economic and Financial Conditions

Developments since the previous Board meeting in June 2017 showed that the global recovery continued at a solid pace. International forecasting institutions slightly revised up global economic projections for 2017 and 2018 and expected next year's performance to outpace this year's. World trade volume growth also gained momentum from a recovering global economy, with steady growth to continue next year. Economic activity in most major economies picked up this year. As for next year, most of them are expected to grow at a slightly slower or similar pace, except for the U.S. where the economy is projected to strengthen further. Recent data pointed to mild inflation in major economies. Global inflation outlook is stable for both 2017 and 2018 according to international forecasting institutions.

In the international financial markets, major currencies broadly appreciated against the US dollar and the dollar index dipped to a two-year low in early September. The euro and the Japanese yen rose against the US dollar, and most Asian currencies also strengthened. Meanwhile, the global stock markets recorded an extended rally on the back of the global economic pickup and loose monetary conditions.

Key risks facing the global economy are threefold: (1) uncertainties over major economies' policies, including the U.S. economic and fiscal policies, Brexit negotiations, and monetary tightening by the world's main central banks

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(as the Fed began to reduce its securities holdings and would likely raise policy rates further, and the ECB is also expected to review its asset purchase program); (2) developments associated with trade protectionism; (3) impacts arising from geopolitical conflicts and climate change, including escalating tensions on the Korean Peninsula, a string of terrorist attacks in Europe, and disaster-related damage resulting from extreme weather.

2. Domestic Economic and Financial Conditions

(1) Economic situation

During the period since the Board last convened, Taiwan enjoyed robust export growth amidst a global economic pickup. The Manufacturing Purchasing Managers' Index (PMI) and the Non-Manufacturing Index (NMI) both showed expansion. Nevertheless, limited wage increases and a higher base-year amount of machinery/equipment investment resulted in moderate growth in private consumption and investment, leading to a mild economic recovery. Projections by major forecasting institutions at home and abroad put Taiwan's GDP growth rate at 2.08%-2.18% this year and 2.15%-2.27% next year, while the Bank's own forecast is 2.15% this year and 2.20% next year. The government's plan to raise wages for the public sector might prompt the private sector to increase wages too. With this potential positive effect on private consumption, next year's GDP growth projection is likely to be revised up.

In terms of external demand, bolstered by a stronger global economy and a lower base effect, Taiwan's exports grew by 12.5% during the first eight months of this year. The biggest contribution came from increased exports of electronic parts and components thanks to solid global demand for semiconductors. Exports to all major destination economies, especially South Korea, China, and

ASEAN, registered positive growth. The outlook for Taiwan's exports is expected to be supported by a steady global recovery, strong semiconductor demand, and introduction of new hand-held mobile devices. However, this momentum could be slowed by uncertainties over the global economic outlook and a dissipating lower base effect. For 2017 and 2018, Taiwan's exports are expected to post moderate growth.

In regard to domestic demand, corporate profit gains translated into improvements in the labor market and cash dividends to stockholders reached a five-year high. Both were considered conducive to private consumption, though wage growth was moderate. In this view, private consumption will likely record modest growth this year and grow slightly further next year.

As for private investment, business sentiment was generally positive, commercial real estate saw an increase in demand, and the government was dedicated to carrying out the Forward-Looking Infrastructure Development Program. Despite these supportive forces, capital equipment imports dropped sharply in recent months as investment in semiconductor machinery and equipment was compared against a higher base. On balance, the Bank forecast Taiwan's private investment to grow modestly in 2017 while next year's growth rate would be slightly lower than this year.

Labor market conditions continued to improve as the number of employed persons further increased, the unemployment rate fell year on year, and the average wage posted a mild increase.

(2) Financial conditions

In the months after June, market liquidity has remained ample, the annual

growth rate of M2 has stayed within this year's target range (2.5%-6.5%), and bank credit has expanded at a slightly slower pace. The NT dollar appreciated against the US dollar as compared to the same period last year, resulting in slightly tighter financial conditions. Nevertheless, a buoyant stock market and steady market interest rates have helped to keep the overall financial conditions accommodative.

As mentioned, the domestic market interest rates have remained steady. The Bank has managed market liquidity through open market operations and kept banks' excess reserves at an adequately accommodative level. The overnight call loan rate has also been steady. As a result of mild inflation, Taiwan's real interest rate has returned to positive territory, whereas many major economies continued to register negative real interest rates. Assessed against economic conditions, some of those economies enjoy higher GDP growth than Taiwan while recording a relatively lower (negative) real interest rate when compared with Taiwan.

The M2 annual growth rate climbed to 3.75% in August, mainly owing to firms' inward remittances of goods sale proceeds to meet the needs of paying cash dividends. For the first eight months of the year, the M2 annual growth rate averaged 3.71%, lower than the same period last year because of a reduced amount of net foreign capital inflows. In terms of bank credit, the annual growth rate of bank loans and investments decreased slightly to 4.70% in August, mainly attributable to slower growth in bank claims on the government sector as stable gains from tax revenue weakened the need for financing. Bank loans and investment grew at an average pace of 4.68% year on year for the first eight months of the year. During the period of January to August 2017, the average annual growth rate of M2 (3.71%) and that of bank loans and investments (4.68%) were both higher than the sum of the 2017 projected GDP and CPI

annual growth rates (2.95%). This indicates market liquidity conditions are sufficient in meeting the need of economic activity.

Looking ahead, cross-border capital movements will likely become a major influence behind Taiwan's M2 growth as the global outlook is still shrouded by uncertainties and the U.S. Fed will move ahead with balance sheet reduction and rate hikes. Meanwhile, demand for funds driven by the economic recovery is expected to support continued growth in bank loans and investments.

(3) Price Trends

The international oil prices have trended upwards since June, spurred by Saudi Arabia's policy to cut its oil exports and a higher oil demand after the hard-hit U.S. refineries restored operations following Hurricane Harvey. Global grain prices dropped and stayed steadily low afterwards as supply exceeded demand amid favorable weather conditions in grain producer countries.

Reflecting these trends, rebounding food prices have sent the domestic consumer price index to rise modestly year on year from June. The annual CPI growth rates averaged 0.72% between January and August, mainly because a slump in vegetable prices largely offset the price rises in fuel and food away from home. The average core CPI annual growth rate (excluding fruit, vegetables, and energy prices) for the same period was 0.97%. In sum, current inflation remains mild.

Soft domestic demand has led the output gap, a key factor of inflationary pressures, to be negative. Therefore, inflationary pressures were contained. In this view, the forecasts made by major institutions at home and abroad suggest a mild inflation outlook for Taiwan in 2017. The medians of domestic institutions'

forecasts for 2017 and 2018 are 1.00% and 1.12%, respectively, while those of international institutions' forecasts are 0.90% for 2017 and 1.30% for 2018. According to the Bank's own forecasts, the CPI annual growth rate is projected to be 0.80% this year and 1.12% next year, and core CPI is expected to rise 1.04% this year and 1.13% next year. The inflation outlook remains stable.

As for future determinants of price trends, sources of upside pressures include: higher cigarette prices after the recent cigarette tax hike, anticipated mild rises in global oil prices, and the minimum wage increase as well as a 3% wage hike for public sector employees from January 2018. Downside pressures might come from a still negative output gap as aggregate demand could be slightly weaker than needed amid a lukewarm economic recovery, and further reductions in telecommunication rates.

3. Considerations for Monetary Policy

(1) Global recovery is steadily on track, but uncertainties remain.

Since entering the second half of the year, both advanced and emerging market economies have experienced a steady recovery and are projected to perform better next year than this year. However, the U.S. Fed will soon begin with balance sheet normalization while the European Central Bank is about to review its asset purchase program. In addition, the U.S. economic and trade policies, trade protectionism, and geopolitical conflicts are also among the factors clouding the global economic and financial prospects.

(2) From the second half of 2017 to 2018, Taiwan's economic growth is likely to advance with mild momentum and to remain lower than potential.

Lingering uncertainties over the global economy could dampen external

demand. Meanwhile, domestic demand was tepid as retail sales continued to contract in recent months, and private investment was somewhat reserved as reflected in declining capital equipment imports. The economy is expected to advance with moderate momentum in the second half of 2017 and in 2018.

(3) Current inflationary pressures and expected inflation are both mild.

During the period of January to August, domestic inflation has been mild. As moderate oil price rises next year might lead to subdued global inflation expectations and soft domestic demand could also cause the output gap to remain negative, the inflation outlook is stable.

(4) Taiwan's real interest rate has reached above zero while many major economies still register negative real interest rates.

As a result of mild domestic inflation, Taiwan's real interest rate has returned to positive territory whereas those of many major economies remain negative. Compared with Taiwan, some of these economies exhibit higher economic growth rates but lower, and negative, real interest rates.

II. Proposition and Decision about Monetary Policy

- 1. Policy Proposition: To keep the discount rate, the rate on accommodations with collateral, and the rate on accommodations without collateral unchanged at 1.375%, 1.75%, and 3.625%, respectively.
- 2. All Board members approved of keeping policy rates unchanged.

The discussions are summarized as follows.

In respect of the international economic situation, several Board Directors

and Supervisors expressed concern over how global outlook risk factors might affect Taiwan's economic growth. One Board Director pointed out multiple uncertainties looming over the domestic economy, including trade protectionism, Sino-U.S. trade tensions, NAFTA renegotiations, Brexit talks, diverse timeframe and pace to exit quantitative easing policies by major central banks, and frequent cross-border capital movements. One Board Supervisor mentioned that trade protectionism, especially trade friction between the U.S. and China, could exert a powerful influence on Taiwan's economy. Another Board Director further explained that considering a high proportion of Taiwanese investment in many of China's IT giants among the primary exporters to the U.S., heightened trade protectionism could trigger trade conflicts between the U.S. and China, with possible indirect negative impact on Taiwan's economy.

With regard to domestic economic conditions, several Board Directors and Supervisors shared the view that external demand expansion contributed to a mild domestic recovery, but domestic demand remained subdued; they also expressed concerns over persistently sluggish momentum for investment growth. One Board Director pointed out that major foreign and local institutions forecast in September that Taiwan's GDP growth rate next year would register between 2.0% and 2.5%, indicating a mild pace of expansion; therefore, it is important to continue monitoring the trend of growth while exploring ways to stimulate private consumption and investment. Another Board Director mentioned that although continued increases in export orders and export growth in recent months have given a thrust to the economy, investment indicators associated with sustained growth in the longer term showed that Taiwan's investment growth has stayed at a low level for some time. This could afflict longer-term economic growth because faltering investment could hinder acceleration in labor

productivity growth.

One Board Director noted that investment growth would remain stalled if five investment challenges posed by shortages of water, electricity, labor, land, and talent are not effectively addressed. One Board Supervisor stated that among the five challenging issues, electricity shortage is a key concern that could thwart investment. Another Board Director gave the opinion that monetary policy alone cannot overcome the issue of stagnant investment; it is vital that monetary policy be accompanied by other measures, such as those alleviating shortages of electricity and water.

Several Board Directors and Supervisors expressed their views on how the public sector wage increase, effective next year, would affect the economic growth. One Board Director pointed out that this measure would help drive private sector pay hikes and, in turn, prop up private consumption. One Board Director stated that based on the government's survey results, around 20% of private corporations increase regular earnings every year regardless of economic growth; therefore, it remains to be seen whether public sector wage increase will bring forth a broader pay raise across the private sector. One Board Director also noted that the positive effect of the public sector wage increase on private consumption could be offset by a contraction effect as civil servants might tighten their purse strings on concern over reduced income post retirement following the pension reform.

One Board Supervisor further noted that the public sector pay raise would have a less aggregate effect on driving consumption growth because it would be partially financed by curtailing government current spending; moreover, if a larger part of the increase in consumption goes into outbound travel or import purchases, this would mean less contribution to domestic economic growth. One Board Director expressed a similar view, saying that (outbound) travel expenditures have made up an increasingly larger share of GDP in recent years, and private consumption growth, if partially offset by growth in imports, would hardly benefit economic growth. Currently available forecasts by major institutions including the Bank have not yet taken into account the effect of next year's public sector wage hike, which is expected to boost the 2018 GDP growth a little further.

On a related note, one Board Director pointed out that there remain many uncertainties about future economic growth; public sector wage hike and stable electricity supply are both pivotal to domestic demand strength and production activity. In addition, cross-strait economic and trade developments and the effectiveness of arch government projects including Forward-Looking Infrastructure Development Program and Digital Nation and Innovative Economic Development Plan also play a key role in determining domestic growth momentum. Close attention is warranted.

The Board Directors also shared their opinions about the output gap. One Board Director noted that, according to the estimated potential output growth rate based on GDP forecasts by the Directorate General of Budget, Accounting and Statistics as well as the Bank, the negative output gap has widened. Another Board Director mentioned that while anticipating Taiwan's economy to grow faster next year than this year amid a bright global outlook and a gradual domestic recovery, the Bank also projects the negative output gap to widen; this calls for further in-depth study.

In discussions about domestic financial conditions, one Board Director

stated that the Bank has maintained banks' excess reserves at an appropriate level, and the overnight call loan rate and the money market rate have been stable. For the first eight months of the year, the average annual growth rate of M2 stayed within this year's target range. From June onwards, the annual growth rate of total outstanding loans and investments of monetary financial institutions has declined slightly but was still higher than the same period of the previous year. Another Board Director noted that since the beginning of the year both the stock market and the housing market have witnessed stronger trading, compared to the previous year; combined with steady market interest rates, bank lending is expected to register stable growth.

The Board Directors also discussed the Fed's decision to initiate balance sheet normalization in October and how this might affect the NT dollar exchange rate. Balance sheet unwinding will have a similar effect as raising the fed funds rate and could send the 10-year U.S. Treasury term premium higher. In this view, further US dollar strength would be on the horizon, as evident in the fact that the US dollar appreciated soon after the Fed's announcement of the asset reduction plan. If the US dollar does strengthen, this might help ease upward pressures on the currency value of the NT dollar.

In the assessment of major factors on which monetary policy deliberation is based, including domestic inflationary pressures, economic growth, financial conditions, and the real interest rate, several Board Directors expressed the view that against a backdrop of mild inflationary pressures and inflation outlook, lingering uncertainties over economic and financial trends, a widening negative output gap, and a higher real interest rate compared to many major economies, keeping the policy rates unchanged is the appropriate decision. One Board Director pointed out particularly that while the government is promoting

investment in Taiwan and tackling youth unemployment, a rate hike might constrain private consumption, offsetting the benefit of the upcoming public sector wage increase. In order to help move the moderate economic growth towards further expansion, it is appropriate to maintain the current policy rate level.

Another Board Director expressed a similar view that, in the context of a gradual recovery next year and insufficient momentum for private consumption and investment, it is even more important to maintain a stable financial environment while the government is pressing ahead with expansionary fiscal stimulation. A neutral policy stance where the policy rates remain at the same level would also conform to public expectations.

One Board Director showed support for maintaining the current policy rate level, saying that caution is warranted as central banks of Taiwan's major trading partners, as well as main export competitors including South Korea, also held rates unchanged at the juncture where another Fed rate hike is expected near the end of the year.

Based on the assessment of domestic and international economic and financial conditions and prospects, the Board Directors all expressed approval of keeping policy rates unchanged.

3. Monetary Policy Decision: Board members reached a unanimous vote to keep the discount rate, the rate on accommodations with collateral, and the rate on accommodations without collateral unchanged at 1.375%, 1.75%, and 3.625%, respectively.

Voting for the proposition:

Fai-nan Perng, Yu-jer Sheu, Jong-Chin Shen, Chin-long Yang, Tzung-ta Yen, Ming-yih Liang, Sheng-cheng Hu, Tsung-hsien Lin, Chen-chia Lee, Tsan-chang Liao, Chao-yih Chen, Jin-lung Lin, Mei-lie Chu, Chao-hsi Huang, Bih-jane Liu

Voting against the proposition: None.

III. The Press Release

The Board Directors and Supervisors approved unanimously to issue the following press release in the post-meeting press conference, together with the Supplementary Materials for the Post-Monetary Policy Meeting Press Conference prepared by the Bank.

Central Bank of the Republic of China (Taiwan)

PRESS RELEASE

Monetary Policy Decision of the Board Meeting

I. Global economic and financial conditions

Since the Board met in late June this year, advanced economies and emerging market economies have both been recovering at a steady pace. International institutions have revised up global GDP growth forecasts for 2017 and expect the global economy to perform better next year than this year.

However, the US Fed is about to initiate the balance sheet normalization program, while the ECB may also review its asset purchase scheme. In addition, the US economic and trade policies, the rise in trade protectionism, and geopolitical tension will all add to the risk to the global economic and financial outlook.

II. Domestic economic and financial conditions

1. Since mid-2017, solid global economic growth has driven up exports. With regard to domestic demand, private consumption recorded limited growth, while declining capital equipment imports reflected the fact that firms were cautious about investment. The CBC forecasts that, in the second half of the year, Taiwan's economy will expand at an annual rate of 1.93%, slower than the first half year's 2.39%. For the year as a whole, the economic growth projection is 2.15%.

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Export growth is likely to benefit from a firming global economy next year. Meanwhile, the government rolled out the Forward-Looking Infrastructure Development Program to help bolster domestic demand with infrastructure spending. As a result, the CBC forecasts the domestic economy to advance by 2.20% for 2018. Recently-announced pay rise for public sector employees next year may also encourage private enterprises to follow suit, contributing to higher private consumption. This may help the domestic economy to register stronger growth than projected.

Labor market conditions improved further and employment increased continuously, with the services sector accounting for a larger increase than others. For the first seven months of the year, the unemployment rate averaged 3.76%, decreasing by 0.15 percentage points compared to the same period last year.

2. From June onwards, on account of the rebound in domestic food prices, the CPI annual growth rate displayed a mild uptrend and reached 0.96% in August. For the first eight months of the year, the CPI annual growth rate averaged 0.72%. Core inflation (excluding vegetables, fruit, and energy items) recorded an average annual growth rate of 0.97%, indicating mild price rises. The CBC forecasts CPI and core inflation for 2017 to rise 0.80% and 1.04% year on year, respectively.

Looking ahead to 2018, in the context of stabilizing international oil prices, subdued global inflation expectations, moderate domestic demand, and the output gap remaining negative, the CBC projects the annual growth rates of CPI and core CPI for 2018 to be 1.12% and 1.13%, respectively, reflecting a stable inflation outlook.

3. The CBC has continued to conduct open market operations to manage market liquidity. In the months from June to August, banks' excess reserves remained well sufficient. For the first eight months of the year, M2 and bank loans and investments posted average annual growth rates of 3.71% and 4.68%, respectively. This suggests that domestic financial conditions have been adequately accommodative and there is ample market liquidity to support expansions in corporate and household spending.

Since the Board last convened, the NT dollar has strengthened slightly against the US dollar, the interbank overnight call loan rates have held steady, and government bond yields have trended down. While many countries registered negative real interest rates, Taiwan has seen its real interest rate return to positive territory (see Appendices 1 and 2).

III. Interest rate decision

In sum, uncertainties over the global economic outlook still weigh on external demand; domestic demand is mild, and economic growth, though projected to pick up at a moderate pace in the second half of this year and next year, would still run below potential. Meanwhile, the real interest rate has risen above zero, and both current inflation and inflation expectations stay anchored. Against this backdrop, the Board judged that a policy rate hold is conducive to financial stability and economic recovery.

The Board reached the following decision unanimously at the Meeting today:

The discount rate, the rate on accommodations with collateral, and the rate on accommodations without collateral are kept unchanged at 1.375%, 1.75%, and 3.625%, respectively.

The CBC will continue to closely monitor the latest developments in both actual and expected inflation, output gap, and other international and domestic economic and financial conditions. We will undertake appropriate monetary policy actions accordingly in an attempt to fulfill the central bank's statutory mandate.

IV. In principle, the NT dollar exchange rate is determined by market forces. If irregular factors (such as massive inflows or outflows of short-term capital) lead to excess volatility and disorderly movements in the NT dollar exchange rate with adverse implications for economic and financial stability, the CBC will, in line with its mandate, step in to maintain an orderly market so as to ensure economic and financial stability.

Appendix 1

Real Interest Rates and Economic Growth of Selected Economies

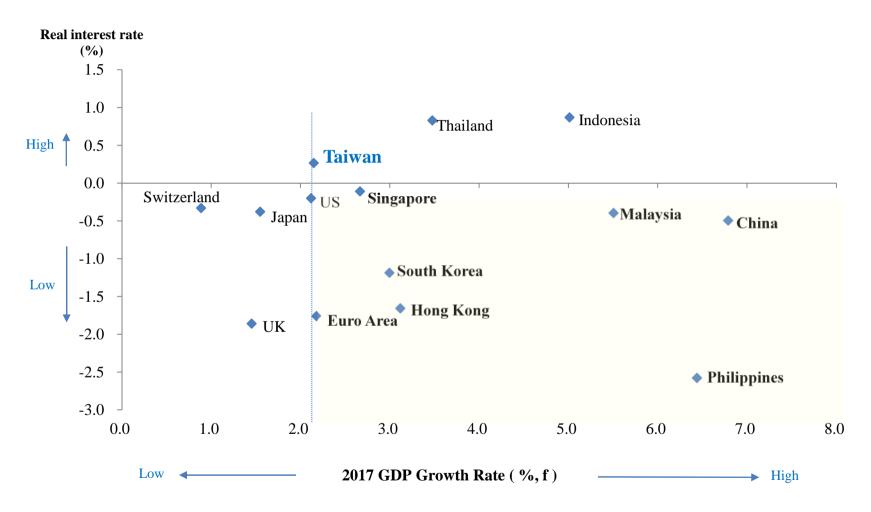
Unit: %

Economies	(1) 1-year time deposit rate (As of 2017/9/21)	(2) CPI annual growth rate ** (2017 forecast)	(3)=(1)-(2) Real interest rate	GDP growth rate (2017 forecast)**
Indonesia	4.750	3.88	0.870	5.0
Thailand	1.500	0.67	0.830	3.5
Taiwan	1.065*	0.80	0.265	2.15
Singapore	0.250	0.36	-0.110	2.7
US	1.770	1.97	-0.200	2.1
Switzerland	0.160	0.49	-0.330	0.9
Japan	0.012	0.39	-0.378	1.6
Malaysia	2.850	3.25	-0.400	5.5
China	1.500	2.00	-0.500	6.8
South Korea	1.000	2.19	-1.190	3.0
Hong Kong	0.050	1.71	-1.660	3.1
Euro Area	-0.250	1.51	-1.760	2.2
UK	0.750	2.61	-1.860	1.5
The Philippines	0.500	3.08	-2.580	6.4

^{* 1-}year time-deposit floating rate of the five major domestic banks.

^{**} IHS Markit projections, as of September 15, 2017. Forecasts for Taiwan are CBC's projections.

Appendix 2 Real Interest Rates and Economic Growth of Selected Economies



Sources: See Appendix 1